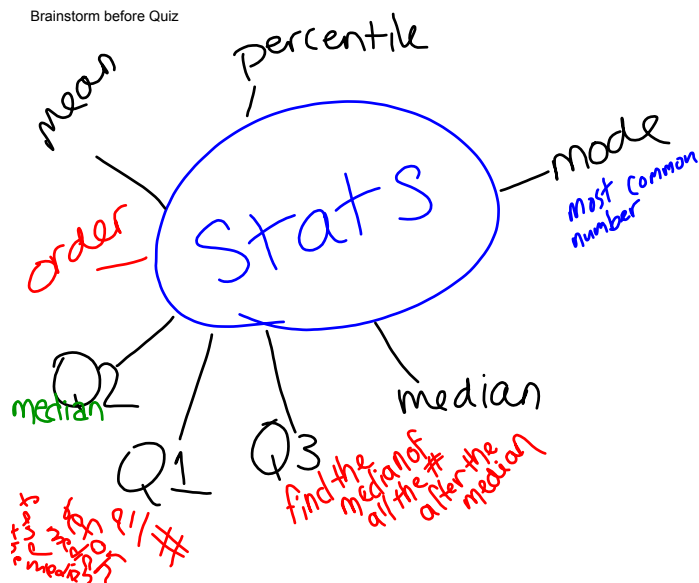


Brainstorm before Quiz



3 4 6 9 11 13

$$\frac{6}{0.2} \times 6 = 1.2 = 2$$

2, 3, 5, 6, 7, 9, 10,
13, 17, 19, 20, 23

Tonight

- be able to calculate standard deviation
- be able to draw a line of best fit
- be able to state coefficient of correlation from a graph

σ Sigma $\bar{x} = \text{mean}$

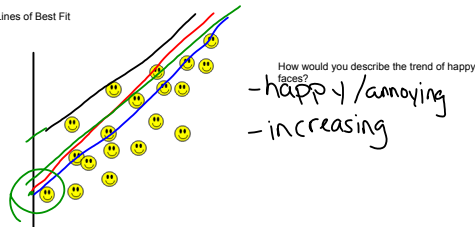
Standard Deviation for Toby:

| Number of Pizzas | $x - \bar{x}$ | $(x - \bar{x})^2$ |
|------------------|------------------|-------------------|
| 54 | $54 - 104 = -50$ | $(-50)^2 = 2500$ |
| 152 | $152 - 104 = 48$ | $48^2 = 2304$ |
| 180 | $180 - 104 = 76$ | $76^2 = 5776$ |
| 12 | $12 - 104 = -92$ | $(-92)^2 = 8464$ |
| 72 | $72 - 104 = -32$ | $(-32)^2 = 1024$ |
| 126 | $126 - 104 = 22$ | $22^2 = 484$ |
| 104 | $104 - 104 = 0$ | $0^2 = 0$ |
| 132 | $132 - 104 = 28$ | $28^2 = 784$ |
| | | 21336 |

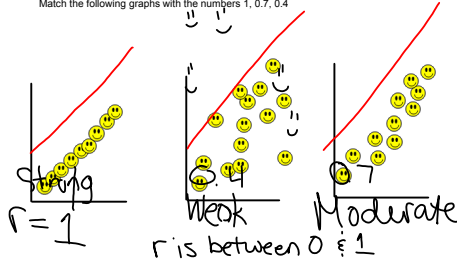
• Try Data Set a and Data Set b

$$\begin{aligned} 21336 \div 8 &= 2667 \\ \sigma &= \sqrt{2667} = 51.64 \end{aligned}$$

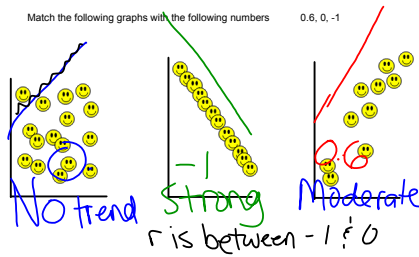
Lines of Best Fit



Match the following graphs with the numbers 1, 0.7, 0.4



Match the following graphs with the following numbers 0.6, 0, -1



r is between -1 & 1